

## Technology 2003 Paper Abstract

**Name:** Paul Backes \*, Mark Long †, Robert Steele †

**Position/Title:** \* Group Leader, † Member of Technical Staff

**Affiliation:** Jet Propulsion Laboratory

**Address:**

Mail Stop 198 219  
4800 Oak Grove Dr.  
Pasadena, CA 91109

**Phone Number:** 818 354 3850

**Fax Number:** 818 393 5007

**Govt. Agency/Lab The Subject of (this) Paper Was Developed By/For:** NASA/JPL

**Category:** Robotics

**Paper Title:** An Ada Language Modular Telerobot Task Execution System

**Description:**

A telerobot task execution system is described which has been developed for space flight applications. The Modular Telerobot Task Execution System (MOTES) provides the remote site task execution capability in a local remote telerobotics system. The system provides supervised autonomous control, shared control, and teleoperation for a redundant manipulator. The system is capable of nominal task execution as well as monitoring and reflex motion. A command interpreter is used to interpret commands received at the local site. Execution utilizes multiple control modules which execute based upon command parameterization. The system is written in Ada and runs in a VME environment on 68020 processors and controls a Robotics Research KI207 seven degree of freedom manipulator.